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Reply to Office Action of May 6, 2004

Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of Claims in the application.

Listing of Claims:

1. (Previously Presented) An array for a display, comprising:
 - a plurality of row positions and a plurality of column positions;
 - a plurality of three-color pixel elements, one of said three-color pixel elements disposed in each of said row positions and said column positions, each of said three-color pixel elements comprising:
 - a blue emitter disposed at a center of a square disposed at an origin of an X, Y coordinate system having a first, a second, a third, and a fourth quadrant, wherein said blue emitter is square-shaped;
 - a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said second and said fourth quadrants, wherein said red emitters occupy a portion of said second and said fourth quadrants not occupied by said blue emitter, wherein said red emitters are generally square-shaped having truncated inwardly-facing corners forming edges parallel to sides of said blue emitter;
 - a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said first and said third quadrants, wherein said green emitters occupy a portion of said first and said third quadrants not occupied by

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said blue emitter, wherein said green emitters are generally square-shaped having truncated inwardly-facing corners forming edges parallel to said sides of said blue emitter;

a pair of row lines associated with each said row position in said array, a first of said row lines coupled to said red emitters and to said green emitters in said row position disposed above said origin of said coordinate system in each of said three-color pixel elements and coupled to said blue emitters of every even pair of adjacent said three-color pixel elements in said row position, and a second of said row lines coupled to said red emitters and to said green emitters in said row position disposed below said origin of said coordinate system in each of said three-color pixel elements, and coupled to said blue emitters of every odd pair of adjacent said three-color pixel elements in said row position; and

three column lines associated with each said column position in said array, a first of said column lines coupled to said red emitters and to said green emitters in said column position disposed left of said origin of said rectangular coordinate system in each of said three-color pixel elements, a second of said column lines coupled to said blue emitter in said column position disposed at said origin of said rectangular coordinate system in each of said three-color pixel elements, and a third of said column lines coupled to said red emitters and to said green emitters in said column position disposed right of said origin of said rectangular coordinate system in each of said three-color pixel elements, wherein said second column line is coupled to said second column line of a next nearest neighboring said three-color pixel element.

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2. (Original) The array of claim 1, wherein each said three-color pixel element in a row direction has a spatial frequency greater than a column direction.
3. (Original) The array of claim 1, wherein each said three-color pixel element in a column direction has a spatial frequency greater than in a row direction.
4. (Original) The array of claim 1, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
5. (Original) The array of claim 1, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.
6. (Original) The array of claim 1, wherein said array is driven by dot inversion.
7. (Previously Presented) An array for a display, comprising:
 - a plurality of row positions and a plurality of column positions;
 - a plurality of three-color pixel elements, one of said elements disposed in each of said row positions and said column positions, each of said three-color pixel elements comprising:

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a blue emitter disposed at a center of a square disposed at an origin of an X, Y coordinate system having a first, a second, a third, and a fourth quadrant, wherein said blue emitter is square-shaped;

a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said second and said fourth quadrants, wherein said red emitters occupy a portion of said second and said fourth quadrants not occupied by said blue emitter, wherein said red emitters are L-shaped;

a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said first and said third quadrants, wherein said green emitters occupy a portion of said first and said third quadrants not occupied by said blue emitter, wherein said green emitters are L-shaped;

a pair of row lines associated with each said row position in said array, a first of said row lines coupled to said red emitters and to said green emitters in said row position disposed above said origin of said coordinate system in each of said three-color pixel elements and coupled to said blue emitters of every even pair of adjacent said three-color pixel elements in said row position, and a second of said row lines coupled to said red emitters and to said green emitters in said row position disposed below said origin of said coordinate system in each of said three-color pixel elements and coupled to said blue emitters of every odd pair of adjacent said three-color pixel elements in said row position; and

three column lines associated with each said column position in said array, a first of said column lines coupled to said red emitters and to said green emitters in said column position disposed left of said center of said square in each of said three-color

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pixel elements, a second of said column lines coupled to said blue emitter in said column position disposed at said center of said square in each of said three-color pixel elements, and a third of said column lines coupled to said red emitters and to said green emitters in said column position disposed right of said center of said square in each of said three-color pixel elements, wherein said second column line is coupled to said second column line of a next nearest neighboring said three-color pixel element.

8. (Original) The array of claim 7, wherein each said three-color pixel element in a row direction has a spatial frequency greater than in a column direction.
9. (Original) The array of claim 7, wherein each said three-color pixel element in a column direction has a spatial frequency greater than in a row direction.
10. (Original) The array of claim 7, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
11. (Original) The array of claim 7, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.
12. (Original) The array of claim 7, wherein said array is driven by dot inversion.

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13. (Previously Presented) An array of three-color pixel elements, comprising:
- an array row comprising first, second, third, and fourth three-color pixel elements, each three-color pixel element comprising a blue emitter disposed at a center of a square disposed at an origin of an X, Y coordinate system having a first, a second, a third, and a fourth quadrant, wherein said blue emitter is square-shaped, a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said second and said fourth quadrants, wherein said red emitters occupy a portion of said second and said fourth quadrants not occupied by said blue emitter, wherein said red emitters are generally square-shaped having truncated inwardly-facing corners forming edges parallel to sides of said blue emitter, and a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said first and said third quadrants, wherein said green emitters occupy a portion of said first and said third quadrants not occupied by said blue emitter, wherein said green emitters are generally square-shaped having truncated inwardly-facing corners forming edges parallel to said sides of said blue emitter;
 - first and second row line drivers coupled to said array row;
 - a first row line coupled to said first row line driver, said first row line coupled to said blue emitter of said third and said fourth three-color pixel elements and to a first of said red emitters and a first of said green emitters of said first, second, third, and fourth three-color pixel elements;
 - a second row line coupled to said second row line driver, said second row line coupled to said blue emitter of said first and said second three-color pixel elements and

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to a second of said red emitters and a second of said green emitters of said first, second, third, and fourth three-color pixel elements;

first through tenth column line drivers coupled to said three-color pixel elements;

a first column line coupled to said first column line driver, said first column line coupled to said first red emitter and said second green emitter of said first three-color pixel element;

a second column line coupled to said second column line driver, said second column line coupled to said blue emitter of said first three-color pixel element and to an eighth column line coupled to said blue emitter of said third three-color pixel element;

a third column line coupled to said third column line driver, said third column line coupled to said second red emitter and said first green emitter of said first three-color pixel element;

a fourth column line coupled to said fourth column line driver, said fourth column line coupled to said first red emitter and said second green emitter of said second three-color pixel element;

a fifth column line coupled to said fifth column line driver, said fifth column line coupled to said blue emitter of said second three-color pixel element and to an eleventh column line coupled to said blue emitter of said fourth three-color pixel element;

a sixth column line coupled to said sixth column line driver, said sixth column line coupled to said second red emitter and said first green emitter of said second three-color pixel element;

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a seventh column line coupled to said seventh column line driver, said seventh column line coupled to said first red emitter and said second green emitter of said third three-color pixel element;

a ninth column line coupled to said eighth column line driver, said ninth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element;

a tenth column line coupled to said ninth column line driver, said tenth column line coupled to said first red emitter and said second green emitter of said fourth three-color pixel element; and

a twelfth column line coupled to said tenth column line driver, said tenth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element.

14. (Original) The array of claim 13, wherein said array is driven by dot inversion.
15. (Original) The array of claim 13, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
16. (Original) The array of claim 13, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.

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17. (Original) The array of claim 13, further comprising another blue emitter in each said three-color pixel element.
18. (Previously Presented) An array of three-color pixel elements, comprising:
an array row comprising first, second, third, and fourth three-color pixel elements, each three-color pixel element comprising a blue emitter disposed at a center of a square disposed at an origin of an X, Y coordinate system having a first, a second, a third, and a fourth quadrant, wherein said blue emitter is square-shaped, a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said second and said fourth quadrants, wherein said red emitters occupy a portion of said second and said fourth quadrants not occupied by said blue emitter, wherein said red emitters are L-shaped, and a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said first and said third quadrants, wherein said green emitters occupy a portion of said first and said third quadrants not occupied by said blue emitter, wherein said green emitters are L-shaped;
first and second row line drivers coupled to said array row;
a first row line coupled to said first row line driver, said first row line coupled to said blue emitter of said third and said fourth three-color pixel element and to a first of said red emitters and a first of said green emitters of said first, second, third, and fourth three-color pixel elements;
a second row line coupled to said second row line driver, said second row line coupled to said blue emitter of said first and said second three-color pixel element and

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to a second of said red emitters and a second of said green emitters of said first, second, third, and fourth three-color pixel elements;

first through tenth column line drivers coupled to said three-color pixel element;

a first column line coupled to said first column line driver, said first column line coupled to said first red emitter and said second green emitter of said first three-color pixel element;

a second column line coupled to said second column line driver, said second column line coupled to said blue emitter of said first three-color pixel element and to an eighth column line coupled to said blue emitter of said third three-color pixel element;

a third column line coupled to said third column line driver, said third column line coupled to said second red emitter and said first green emitter of said first three-color pixel element;

a fourth column line coupled to said fourth column line driver, said fourth column line coupled to said first red emitter and said second green emitter of said second three-color pixel element;

a fifth column line coupled to said fifth column line driver, said fifth column line coupled to said blue emitter of said second three-color pixel element and to an eleventh column line coupled to said blue emitter of said fourth three-color pixel element;

a sixth column line coupled to said sixth column line driver, said sixth column line coupled to said second red emitter and said first green emitter of said second three-color pixel element;

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a seventh column line coupled to said seventh column line driver, said seventh column line coupled to said first red emitter and said second green emitter of said third three-color pixel element;

a ninth column line coupled to said eighth column line driver, said ninth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element;

a tenth column line coupled to said ninth column line driver, said tenth column line coupled to said first red emitter and said second green emitter of said fourth three-color pixel element; and

a twelfth column line coupled to said tenth column line driver, said tenth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element.

19. (Original) The array of claim 18, wherein said array is driven by dot inversion.
20. (Original) The array of claim 18, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
21. (Original) The array of claim 18, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.

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22. (Original) The array of claim 18, further comprising another blue emitter in each said three-color pixel element.
23. (Currently Amended) A three-color pixel element for a display, comprising:
first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon;
wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row;
wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row; and
wherein a blue emitter occupies a center unit-area polygon in both said first and said second pixel rows; and
further wherein at least two blue emitters of at least two three-color pixel elements are connected to a same data driver.
24. (Previously Presented) The three-color pixel element of claim 23, wherein said green emitter occupies said left unit-area polygon in said first pixel row and said red emitter occupies said right unit-area polygon in said first pixel row; and wherein said red emitter occupies said left unit-area polygon in said second pixel row and said green emitter occupies said right unit-area polygon in said second pixel row.
25. (Original) The three-color pixel element of claim 23, wherein said unit-area polygon is a square.

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26. (Original) The three-color pixel element of claim 23, wherein said unit-area polygon is a rectangle.
27. (Original) The three-color pixel element of claim 23, wherein said blue emitters occupying said center unit-area polygon in both said first and said second pixel rows are wired together.
28. (Previously Presented) An array for a display, comprising:
a plurality of array row positions and a plurality of column positions;
a plurality of three-color pixel elements, one of said three-color pixel elements disposed in each of said row positions and said column positions, each of said three-color pixel elements comprising:
first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row, wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row, and wherein a blue emitter occupies a center unit-area polygon in both said first and said second pixel rows;
a plurality of row lines associated with each said row position in said array, a first of said row lines coupled to said blue emitter in said first pixel row, to said red emitters in said first pixel row and to said green emitters in said first pixel row in each of said

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three-color pixel elements in said array row position, wherein said first of said row lines is coupled to said blue emitters in said first pixel row of every even pair of adjacent said three-color pixel elements, and a second of said row lines coupled to said blue emitter in said second pixel row, to said red emitters in said second pixel row, and to said green emitters in said second pixel row in each of said three-color pixel elements in said array row position, wherein said second of said row lines is coupled to said blue emitters in said second row of every odd pair of adjacent said three-color pixel elements; and

a plurality of column lines associated with each said column position, a first of said column lines coupled to said red emitters and to said green emitters in said column position disposed left of said blue emitters in each of said three-color pixel elements, a second of said column lines coupled to said blue emitters in said column position disposed at said center of square in each of said three-color pixel elements, and a third of said column lines coupled to said red emitters and to said green emitters in said column position disposed right of said blue emitters in each of said three-color pixel elements, wherein said second column line is coupled to said second column line of a next nearest neighboring said three-color pixel element.

29. (Original) The array of claim 28, wherein each said three-color pixel element in a row direction has a spatial frequency greater than in a column direction.

30. (Original) The array of claim 28, wherein each said three-color pixel element in a column direction has a spatial frequency greater than in a row direction.

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31. (Original) The array of claim 28, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
32. (Original) The array of claim 28, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.
33. (Original) The array of claim 28, wherein said array is driven by dot inversion.
34. (Previously Presented) The array of claim 28, wherein said green emitter occupies said left unit-area polygon in said first pixel row and said red emitter occupies said right unit-area polygon in said first pixel row; and wherein said red emitter occupies said left unit-area polygon in said second pixel row and said green emitter occupies said right unit-area polygon in said second pixel row.
35. (Original) The array of claim 28, wherein said unit-area polygon is a square.
36. (Original) The array of claim 28, wherein said unit-area polygon is a rectangle.
37. (Original) The array of claim 28, wherein said blue emitters occupying said center unit-area polygon in both said first and said second pixel rows are wired together.

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38. (Previously Presented) An array of three-color pixel elements, comprising:
an array row comprising first, second, third, and fourth three-color pixel elements,
each said three-color pixel element comprising first and second pixel rows, each pixel
row including three unit-area polygons, wherein an emitter occupies each said unit-area
polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row
and a green emitter occupies a right unit-area polygon in said first pixel row, wherein a
green emitter occupies a left unit-area polygon in said second pixel row and a red
emitter occupies a right unit-area polygon in said second pixel row, and wherein a blue
emitter occupies a center unit-area polygon in both said first and said second pixel
rows;

first and second row line drivers coupled to said array row;

a first row line coupled to said first row line driver, said first row line coupled to
said blue emitters in said first pixel row of said third and said fourth three-color pixel
element and to said red emitter and said green emitter in said first pixel row of said first,
second, third, and fourth three-color pixel elements;

a second row line coupled to said second row line driver, said second row line
coupled to said blue emitters in said second pixel row of said first and said second
three-color pixel element and to said red emitter and said green emitter in said second
pixel row of said first, second, third, and fourth three-color pixel elements;

first through tenth column line drivers coupled to said three-color pixel elements;

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a first column line coupled to said first column line driver, said first column line coupled to said red emitter in said first pixel row and said green emitter in said first pixel row of said first three-color pixel element;

a second column line coupled to said second column line driver, said second column line coupled to said blue emitters of said first three-color pixel element and to an eighth column line coupled to said blue emitters of said third three-color pixel element;

a third column line coupled to said third column line driver, said third column line coupled to said red emitter in said second pixel row and said green emitter in said first pixel row of said first three-color pixel element;

a fourth column line coupled to said fourth column line driver, said fourth column line coupled to said red emitter in said first pixel row and said green emitter in said second pixel row of said second three-color pixel element;

a fifth column line coupled to said fifth column line driver, said fifth column line coupled to said blue emitters of said second three-color pixel element and to an eleventh column line coupled to said blue emitters of said fourth three-color pixel element;

a sixth column line coupled to said sixth column line driver, said sixth column line coupled to said red emitter in said second pixel row and said green emitter in said first pixel row of said second three-color pixel element;

a seventh column line coupled to said seventh column line driver, said seventh column line coupled to said red emitter in said first pixel row and said green emitter in said second pixel row of said third three-color pixel element;

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a ninth column line coupled to said eighth column line driver, said ninth column line coupled to said red emitter in said second pixel row and said green emitter in said first pixel row of said fourth three-color pixel element;

a tenth column line coupled to said ninth column line driver, said tenth column line coupled to said red emitter in said first pixel row and said green emitter in said second pixel row of said fourth three-color pixel element; and

a twelfth column line coupled to said tenth column line driver, said tenth column line coupled to said second red emitter and said first green emitter of said fourth three-color pixel element.

39. (Original) The array of claim 38, wherein said array is driven by dot inversion.
40. (Original) The array of claim 38, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
41. (Original) The array of claim 38, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.
42. (Previously Presented) The array of claim 38, wherein said green emitter occupies said left unit-area polygon in said first row and said red emitter occupies said right unit-area polygon in said first row; and wherein said red emitter occupies said left

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unit-area polygon in said first row and said green emitter occupies said right unit-area polygon in said first row.

43. (Original) The array of claim 38, wherein said unit-area polygon is a square.
44. (Original) The array of claim 38, wherein said unit-area polygon is a rectangle.
45. (Original) The array of claim 38, wherein said blue emitters occupying said center unit-area polygon in both said first and said second rows are wired together.
46. (Currently Amended) A three-color pixel element for a display, comprising:
first and second pixel rows, each pixel row including three unit-area polygons,
wherein an emitter occupies each said unit-area polygon;
wherein a red emitter occupies a left unit-area polygon in said first pixel row and
a green emitter occupies a right unit-area polygon in said first pixel row;
wherein a green emitter occupies a left unit-area polygon in said second pixel
row and a red emitter occupies a right unit-area polygon in said second pixel row; and
wherein a single blue emitter occupies both center unit-area polygons in said first
and said second pixel rows; and
further wherein at least two blue emitters of at least two three-color pixel
elements are connected to a same data driver.
47. (Previously Presented) The three-color pixel element of claim 46, wherein said

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green emitter occupies said left unit-area polygon in said first pixel row and said red emitter occupies said right unit-area polygon in said first pixel row; and wherein said red emitter occupies said left unit-area polygon in said second pixel row and said green emitter occupies said right unit-area polygon in said second pixel row.

48. (Original) The three-color pixel element of claim 46, wherein said unit-area polygon is a square.

49. (Original) The three-color pixel element of claim 46, wherein said unit-area polygon is a rectangle.

50. (Previously Presented) An array for a display, comprising:
a plurality of array row positions and a plurality of column positions;
a plurality of three-color pixel elements, one of said three-color pixel elements disposed in each of said row positions and said column positions, each of said three-color pixel elements comprising:
first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row; wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row; and wherein a single blue emitter occupies both center unit-area polygons in said first and said second pixel rows;

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a plurality of row lines associated with each said row position in said array, a first of said row lines coupled to said blue emitter, to said red emitters, and to said green emitters in said first pixel row in each of said three-color pixel elements in said array row position, wherein said first of said row lines is coupled to said blue emitters of every even pair of adjacent said three-color pixel elements, and a second of said row lines coupled to said blue emitter, to said red emitters, and to said green emitters in said second pixel row in each of said three-color pixel elements in said array row position, wherein said second of said row lines is coupled to said blue emitters of every odd pair of adjacent said three-color pixel elements; and

a plurality of column lines associated with each said column position in said array, a first of said column lines coupled to said red emitters and to said green emitters in said column position disposed left of said blue emitter in each of said three-color pixel elements, a second of said column lines coupled to said blue emitter in said column position in each of said three-color pixel elements, and a third of said column lines coupled to said red emitters and to said green emitters in said column position disposed right of said blue emitter in each of said three-color pixel elements, wherein said second column line is coupled to said second column line of a next nearest neighboring said three-color pixel element.

51. (Original) The array of claim 50, wherein each said three-color pixel element in a row direction has a spatial frequency greater than in a column direction.

52. (Original) The array of claim 50, wherein each said three-color pixel element in a

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column direction has a spatial frequency greater than in a row direction.

53. (Original) The array of claim 50, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
54. (Original) The array of claim 50, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.
55. (Original) The array of claim 50, wherein said array is driven by dot inversion.
56. (Previously Presented) The array of claim 50, wherein said green emitter occupies said left unit-area polygon in said first pixel row and said red emitter occupies said right unit-area polygon in said first pixel row; and wherein said red emitter occupies said left unit-area polygon in said second pixel row and said green emitter occupies said right unit-area polygon in said second pixel row.
57. (Original) The array of claim 50, wherein said unit-area polygon is a square.
58. (Original) The array of claim 50, wherein said unit-area polygon is a rectangle.
59. (Previously Presented) An array of three-color pixel elements, comprising:

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an array row comprising first, second, third, and fourth three-color pixel elements, each three-color pixel element comprising first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row, wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row; and wherein a single blue emitter occupies both center unit-area polygons in said first and said second pixel rows;

first and second row line drivers coupled to said array row;

a first row line coupled to said first row line driver, said first row line coupled to said blue emitters of said third and said fourth three-color pixel element and to said red emitter and said green emitter in said first pixel row of said first, second, third, and fourth three-color pixel elements;

a second row line coupled to said second row line driver, said second row line coupled to said blue emitters of said first and said second three-color pixel element and to said red emitter and said green emitter in said second pixel row of said first, second, third, and fourth three-color pixel elements;

first through tenth column line drivers coupled to said three-color pixel elements;

a first column line coupled to said first column line driver, said first column line coupled to said red emitter in said first pixel row and said green emitter in said second pixel row of said first three-color pixel element;

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a second column line coupled to said second column line driver, said second column line coupled to said blue emitter of said first three-color pixel element and to an eighth column line coupled to said blue emitter of said third three-color pixel element;

a third column line coupled to said third column line driver, said third column line coupled to said red emitter in said second pixel row and said green emitter in said first pixel row of said first three-color pixel element;

a fourth column line coupled to said fourth column line driver, said fourth column line coupled to said red emitter in said first pixel row and said green emitter in said second pixel row of said second three-color pixel element;

a fifth column line coupled to said fifth column line driver, said fifth column line coupled to said blue emitter of said second three-color pixel element and to an eleventh column line coupled to said blue emitter of said fourth three-color pixel element;

a sixth column line coupled to said sixth column line driver, said sixth column line coupled to said red emitter in said second pixel row and said green emitter in said first pixel row of said second three-color pixel element;

a seventh column line coupled to said seventh column line driver, said seventh column line coupled to said red emitter in said first pixel row and said green emitter in said second pixel row of said third three-color pixel element;

a ninth column line coupled to said eighth column line driver, said ninth column line coupled to said red emitter in said second pixel row and said green emitter in said first pixel row of said fourth three-color pixel element;

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a tenth column line coupled to said ninth column line driver, said tenth column line coupled to said red emitter in said first pixel row and said green emitter in said second pixel row of said fourth three-color pixel element; and

a twelfth column line coupled to said tenth column line driver, said tenth column line coupled to said red emitter in said second pixel row and said green emitter in said first pixel row of said fourth three-color pixel element.

60. (Original) The array of claim 59, wherein said array is driven by dot inversion.
61. (Original) The array of claim 59, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
62. (Original) The array of claim 59, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.
63. (Previously Presented) The array of claim 59, wherein said green emitter occupies said left unit-area polygon in said first pixel row and said red emitter occupies said right unit-area polygon in said first pixel row; and wherein said red emitter occupies said left unit-area polygon in said second pixel row and said green emitter occupies said right unit-area polygon in said second pixel row.

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64. (Original) The array of claim 59, wherein said unit-area polygon is a square.
65. (Original) The array of claim 59, wherein said unit-area polygon is a rectangle.
66. (Previously Presented) An array for a display, comprising:
a plurality of array row positions and a plurality of column positions;
a plurality of three-color pixel elements, one of said three-color pixel elements disposed in each of said array row positions and said column positions, wherein each of said three-color pixel elements comprises:
first and second pixel rows, each row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row; wherein a green emitter occupies a left unit-area polygon in said first pixel row and a red emitter occupies a right unit-area polygon in said first pixel row; and wherein a single blue emitter occupies both center unit-area polygons in said first and said second pixel rows;
wherein adjacent horizontal pairs of said three-color pixel elements are vertically offset from one another by one said pixel row;
a plurality of row lines associated with each said array row position,
wherein a first of said row lines is coupled to all said red and said green emitters in said first pixel row of each odd pair of said three-color pixel elements in each said array row position and to all said red and said green emitters in said second pixel row of each even pair of said three-color pixel elements in each said array row position,

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wherein said first of said row lines is coupled to said blue emitters of every odd pair of adjacent said three-color pixel elements;

wherein a second of said row lines is coupled to all said red and said green emitters in said second pixel row of each odd pair of said three-color pixel elements in each said array row position and to all said red and said green emitters in said first pixel row of each even pair of said three-color pixel elements in each said array row position, wherein said first of said row lines is coupled to said blue emitters of every even pair of adjacent said three-color pixel elements; and

a plurality of column lines associated with each said column position in said array;

wherein a first, a fourth, a seventh, and a tenth of said column lines is coupled to said red emitters and to said green emitters in said column position disposed left of said blue emitter in each of said three-color pixel elements;

wherein a second, a fifth, an eighth, and an eleventh of said column lines is coupled to said blue emitter in said column position in each of said three-color pixel elements, wherein said second of said column lines is coupled to said eighth of said column lines and wherein said fifth of said column lines is coupled to said eleventh of said column lines; and

wherein a third, a sixth, a ninth, and a twelfth of said column lines is coupled to said red emitters and to said green emitters in said column position disposed right of said blue emitter in each of said three-color pixel elements.

67. (Original) The array of claim 66, wherein each said three-color pixel element in a

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row direction has a spatial frequency greater than in a column direction.

68. (Original) The array of claim 66, wherein each said three-color pixel element in a column direction has a spatial frequency greater than in a row direction.
69. (Original) The array of claim 66, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.
70. (Original) The array of claim 66, wherein each said column line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.
71. (Original) The array of claim 66, wherein said array is driven by dot inversion.
72. (Previously Presented) The array of claim 66, wherein said green emitter occupies said left unit-area polygon in said first pixel row and said red emitter occupies said right unit-area polygon in said first pixel row; and wherein said red emitter occupies said left unit-area polygon in said second pixel row and said green emitter occupies said right unit-area polygon in said second pixel row.
73. (Original) The array of claim 66, wherein said unit-area polygon is a square.

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74. (Original) The array of claim 66, wherein said unit-area polygon is a rectangle.
75. (Previously Presented) An array of three-color pixel elements, comprising:
a plurality of array rows and a plurality of array columns containing three-color pixel elements, each said three-color pixel element comprising first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row; wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row; and wherein a single blue emitter occupies both center unit-area polygons in said first and said second pixel rows;
wherein adjacent horizontal pairs of said three-color pixel elements are vertically offset from one another by one said pixel row;
first and second row line drivers coupled to said array row;
a first row line coupled to said first row line driver, wherein said first row line is coupled to all said red and said green emitters in said first pixel row of each odd pair of said three-color pixel elements in each said array row position and to all said red and said green emitters in said second pixel row of each even pair of said three-color pixel elements in each said array row position, wherein said first of said row lines is coupled to said blue emitters of every odd pair of adjacent said three-color pixel elements;
a second row line coupled to said second row line driver, wherein said second row line is coupled to all said red and said green emitters in said second pixel row of

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each odd pair of said three-color pixel elements in each said array row position and to all said red and said green emitters in said first pixel row of each even pair of said three-color pixel elements in each said array row position, wherein said first of said row lines is coupled to said blue emitters of every even pair of adjacent said three-color pixel elements; and

first through tenth column line drivers coupled to said three-color pixel elements;

a first column line coupled to said first column line driver, said first column line coupled to all left-most emitters of every said three-color pixel element in a first of said array columns;

a second column line coupled to said second column line driver, said second column line coupled to all center emitters of every said three-color pixel element in a second of said array columns and to an eighth column line coupled to all center emitters of every said three-color pixel element in an eighth of said array columns;

a third column line coupled to said third column line driver, said third column line coupled to all right-most emitters of every said three-color pixel element in a third of said array columns;

a fourth column line coupled to said fourth column line driver, said fourth column line coupled to all left-most emitters of every said three-color pixel element in a fourth of said array columns;

a fifth column line coupled to said fifth column line driver, said fifth column line coupled to all center emitters of every said three-color pixel element in a fifth of said array columns and to an eleventh column line coupled to all center emitters of every said three-color pixel element in an eleventh of said array columns;

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a sixth column line coupled to said sixth column line driver, said sixth column line coupled to all right-most emitters of every said three-color pixel element in a sixth of said array columns;

a seventh column line coupled to said seventh column line driver, said seventh column line coupled to all left-most emitters of every said three-color pixel element in a seventh of said array columns;

a ninth column line coupled to said eighth column line driver, said ninth column line coupled to all right-most emitters of every said three-color pixel element in a ninth of said array columns;

a tenth column line coupled to said ninth column line driver, said tenth column line coupled to all left-most emitters of every said three-color pixel element in a tenth of said array columns; and

a twelfth column line coupled to said tenth column line driver, said twelfth column line coupled to all right-most emitters of every said three-color pixel element in a twelfth of said array columns.

76. (Original) The array of claim 75, wherein said array is driven by dot inversion.

77. (Original) The array of claim 75, wherein each said row line coupled to each said red emitter, said green emitter, and said blue emitter is coupled to a gate of a select transistor.

78. (Original) The array of claim 75, wherein each said column line coupled to each

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said red emitter, said green emitter, and said blue emitter is coupled to a source/drain terminal of a select transistor.

79. (Previously Presented) The array of claim 75, wherein said green emitter occupies said left unit-area polygon in said first pixel row and said red emitter occupies said right unit-area polygon in said first pixel row; and wherein said red emitter occupies said left unit-area polygon in said second pixel row and said green emitter occupies said right unit-area polygon in said second pixel row.

80. (Original) The array of claim 75, wherein said unit-area polygon is a square.

81. (Original) The array of claim 75, wherein said unit-area polygon is a rectangle.

82. (Original) A method of driving a three-color pixel element in a display, comprising:

providing a three-color pixel element comprising a blue emitter disposed at a center of a square disposed at an origin of an X, Y coordinate system having a first, a second, a third, and a fourth quadrant, wherein said blue emitter is square-shaped, a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said second and said fourth quadrants, wherein said red emitters occupy a portion of said second and said fourth quadrants not occupied by said blue emitter, wherein said red emitters are generally square-shaped having truncated inwardly-facing corners forming edges parallel to sides of said blue emitter, and a pair of

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green emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said first and said third quadrants, wherein said green emitters occupy a portion of said first and said third quadrants not occupied by said blue emitter, wherein said green emitters are generally square-shaped having truncated inwardly-facing corners forming edges parallel to said sides of said blue emitter;

and driving said blue emitter, said red emitters, and said green emitters, wherein said blue emitter of said three-color pixel element is coupled to a blue emitter of a next nearest neighboring three-color pixel element.

83. (Original) A method of driving a three-color pixel element in a display, comprising:

providing a three-color pixel element comprising a blue emitter disposed at a center of a square disposed at an origin of an X, Y coordinate system having a first, a second, a third, and a fourth quadrant, wherein said blue emitter is square-shaped, a pair of red emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said second and said fourth quadrants, wherein said red emitters occupy a portion of said second and said fourth quadrants not occupied by said blue emitter, wherein said red emitters are L-shaped, and a pair of green emitters spaced apart from said blue emitter and symmetrically disposed about said blue emitter in said first and said third quadrants, wherein said green emitters occupy a portion of said first and said third quadrants not occupied by said blue emitter, wherein said green emitters are L-shaped; and

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driving said blue emitter, said red emitters, and said green emitters, wherein said blue emitter of said three-color pixel element is coupled to a blue emitter of a next nearest neighboring three-color pixel element.

84. (Original) A method of driving a three-color pixel element in a display, comprising:

providing a three-color pixel element comprising first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row, wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row, and wherein a blue emitter occupies a center unit-area polygon in both said first and said second pixel rows; and

driving said blue emitters, said red emitters, and said green emitters, wherein said blue emitters of said three-color pixel element is coupled to a pair of blue emitters of a next nearest neighboring three-color pixel element.

85. (Original) A method of driving a three-color pixel element in a display, comprising:

providing a three-color pixel element comprising first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said

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first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row; wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row; and wherein a single blue emitter occupies both center unit-area polygons in said first and said second pixel rows; and

driving said blue emitter, said red emitters, and said green emitters, wherein said blue emitter of said three-color pixel element is coupled to a blue emitter of a next nearest neighboring three-color pixel element.

86. (Previously Presented) A method of driving a three-color pixel element in a display, comprising:

providing a three-color pixel element comprising first and second pixel rows, each pixel row including three unit-area polygons, wherein an emitter occupies each said unit-area polygon, wherein a red emitter occupies a left unit-area polygon in said first pixel row and a green emitter occupies a right unit-area polygon in said first pixel row, wherein a green emitter occupies a left unit-area polygon in said second pixel row and a red emitter occupies a right unit-area polygon in said second pixel row, wherein a blue emitter occupies a center unit-area polygon in both said first and said second pixel rows, and wherein adjacent horizontal pairs of said three-color pixel elements are vertically offset from one another by one said pixel row; and

driving said blue emitters, said red emitters, and said green emitters, wherein said blue emitters of said three-color pixel element is coupled to a pair of blue emitters of a next nearest neighboring three-color pixel element.

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87. (New) A display substantially comprising a plurality of three-color pixel elements, each three-color pixel element comprising:

at least one blue emitter;

a pair of red emitters;

a pair of green emitters such that said red emitters and said green emitters form substantially a checkerboard pattern upon said display; and

wherein at least two blue emitters of two three-color pixel elements are connected to a same data driver.

88. (New) The display of claim 87 wherein each three-color pixel element further comprises one of a group of patterns, said group further comprising:

R G	G R	R B G	G B R
B	B	G B R, and	R B G
G R,	R G,		

89. (New) The display of claim 87 wherein said display is one of a group comprising a liquid crystal display, an organic light emitting diode display, an electro luminescent display, a plasma display, and a field emission display.

90. (New) The display of claim 87 wherein said at least two neighboring blue emitters are connected to a same column driver.

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91. (New) The display of claim 87 wherein said at least two neighboring blue emitters are connected to the same row driver.
92. (New) An image capture device comprising a plurality of three-color pixel elements, each three-color pixel element comprising:
- at least one blue emitter;
 - a pair of red emitters;
 - a pair of green emitters such that said red emitters and said green emitters form substantially a checkerboard pattern upon said image capture device.
93. (New) An image storage device substantially comprising a plurality of storage locations associated with three-color pixel elements, each three-color pixel element comprising: at least one blue emitter; a pair of red emitters; and a pair of green emitters such that said red emitters and said green emitters form substantially a checkerboard pattern upon said image capture device.
94. (New) A flat panel display comprising substantially a plurality of three-color pixel elements, each of said three-color pixel element comprising:
- at least one blue emitter;
 - a pair of red emitters;
 - a pair of green emitters such that said red and said green emitters substantially form a checkerboard pattern; and
- wherein further each said emitter is independently addressable.

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95. (New) The flat panel display of claim 94 wherein each emitter is capable of being driven with a variable analog signal.

96. (New) The flat panel display of Claim 94 wherein said display is one of a group comprising a liquid crystal display, an organic light emitting diode display, an electro luminescent display, a plasma display, and a field emission display.

97. (New) A display substantially comprising a plurality of three-color pixel elements formed along a first direction of pixel elements, each three-color pixel element comprising:

at least one blue emitter;

a pair of red emitters;

a pair of green emitters such that said red emitters and said green emitters form substantially a checkerboard pattern upon said display; and

wherein at least two blue emitters in a same first direction of at least two three-color pixel elements are connected to a same data driver.

98. (New) The display of claim 97 wherein each three-color pixel element further comprises one of a group of patterns, said group comprising:

R G	G R	R B G	G B R
B	B	G B R, and	R B G
G R,	R G,		

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99. (New) The display of claim 97 wherein said display is one of a group comprising a liquid crystal display, an organic light emitting diode display, an electro luminescent display, a plasma display, and a field emission display.

100. (New) The display of claim 97 wherein said first direction is a column direction.

101. (New) The display of claim 97 wherein said first direction is a row direction.